Scott. II-27—58,004—27-10-47.

P. W (1949) Department.

P. W SERIES.

G.O. NO. 1515

Dated 28/4/49.

Closed.

Subdt

[Despatch Abstract.]

Irrigation - South Kamara Dt - H.M's Inspection Notes. Papers recorded

A. B. SHETTY, M. L. A. MANGALORE,

22-10-'46 194

To

The Hon. Sri. K. Bhakthavathsalam,
Minister for Public Works, Madras.

Dear Sri. Bhakthavathsalam,

The people of Mundkoor had put up a mud dam for the Mulki river last year and found it very helpful for the Grow More Food campaign. It is being objected to this year. They wish you to personally see the place. You may, therefore, kindly include in your programme a visit to the site of the dam. It is on the Mudbidri-Mulki road. The engineer concerned may also personally inspect the place. I am expecting your tour programme

Yours sincerely,

A. B. Shetty

P.W.D.

Memo. No. 2454-N/46-1 dated 30-10-46

Sub: Irrigation - South Kanara - Mundkoor village - Dam across the Mulki river.
Ref: Letter from Sri A.B. Shetty d/22.10.46.

A copy of the letter (from Sri A.B. Shetty MLA) read above, is forwarded to the Chief Engineer (Irrigation). He is requested to instruct the S.E., Coimbatore or the Executive Engineer to explain the matter to H.M. (P.W) and show him the site when he visits South Kanara

To
The CE (9)
(with copy of
P1 c/o)
Copy to H.M (P.W)

Inspection of Irrigation Schemes by the Hon.Minister for Public Works.

SOUTH KANARA DISTRICT.

1946

11-11-46.

1. Shiriyar scheme:

(Kasargod taluq).

Seen PW
The Memorials may be
seen WCS
19.11.46

The scheme is to construct a low anicut across the Shiriyar river and take the water through a contour channel along the hill slopes for a length of about 7 miles to supply water for an extent of 550 acres for second crop. The approximate cost of the scheme is about Rs. 5,80,000. The return seems to be about 0.6% which is not encouraging. The estimates and plans prepared already may be sent up.

The ryots lower down the river are putting up a mud dam across this river in the limits of Bambrana village. They represented that this temporary dam may be replaced by permanent structures. This may be looked into.

13-11-46.

(a) Reclamation of the swamp in Chaliyar village.

(Mangalore taluk).

An extent of about 120 acres in the Chaliyar village is affected by tidal water and lying fallow. A low dam is requested at the tail end to prevent salt water for reclamation of this area. This may be investigated.

(b) Anicuts across Pavanje river locally known as Chalyar katta alias Uppu neer Katta.

(Mangalore taluk).

A mud dam, is at present, put up annually to irrigate about 300 acres. at a cost of about Rs.1000. The ryots requested to replace it by a permanent structure so as to enable them to raise a second crop over the area and to relieve the annual recurring expenditure. They agreed to pay extra water tax.

(c) Anicuts across Mulki river.

(Mangalore taluk).

1.Phalguni Katta. A mud dam is at present put up annually at a cost of Rs.[illegible] to prevent salt water and to raise a second crop over an extent of about 600 acres. The ryots requested to replace it by a masonry structure. This may be investigated. They are also willing to pay water tax.

2. Mundukur Katta. This temporary dam was put up last year as an experimental measure across the Mulki river about 4 miles above the Phalgun dam, with the concurrence of the ryots under the lower dam. An extent of about 300 acres is said to have been cultivated with a bumper second crop.

The lower ryots appear to be raising objection for this dam under the apprehension that their vested interests may be affected. The ryots were directed to approach the Collector for having the matter settled amicably.

It may be investigated whether an anicut at a higher point will not serve the interests of both the parties, so long as sufficient water is available.

(d) Diverting the water of a drainage course in Udayarhole village to store water in a tank, after improvements.

(Udipi taluk).

The ryots requested to bund up a small drainage course and divert the water for storing in a small tank, after improvements, to raise second and third crops over an extent of 1000 acres. This involves the digging up of a channel of about 2 furlongs in length, acquisition of lands for forming a tank and construction of a regulator across the Pangla Hole. Investigation may be taken up, if it is feasible.

14-[illegible]-42.

Chantar Madaga.
(Udipi taluk).

This is a tank of about 25 acres in extent. At present it irrigates about 600 acres of first crop and about 600 acres of indifferent second ~~xxxxxxxx~~ crop. The tank is proposed to be improved, so as to supply water to irrigate the full extent of 600 acres with the second crop. Plans and estimates are ready and may be sent up for sanction.

Memo. M.2454-N/46-2 dated 27-11-46.

Sub: Irrigation - South Kanara - Inspection of certain Schemes by H.M. (P.W.)

A copy of the inspection note of H.M. (P.W.) is forwarded to the CE (9). He is requested to submit a detailed reports on the various irrigation Schemes mentioned therein

To the CE (9)
(with a copy of P.S.-7 of)

26/11/46

T.M. No. 24834.N/46-3, dated 4-1-47.

To

The Chief Engineer
(Irrigation).

Letter 6/1
10
9/1

Sub: Irrigation South Kanara - Inspection of ~~other~~ schemes by MM & P.W.

Ref: Memo. No. 24534 N/46-2, d/27-11-46

Please expedite reply and state when it may be expected

RSR
23-12-46

4-1-47

P.C. to go

23/12/46

Extract from Copy of Inspection Notes of the Chief Engineer for Irrigation - [illegible]
February, 1947 (No.2882/46 B-7 dated 27th February, 1947).

...

General:-Irrigation schemes in Malabar and South Kanara Districts.

(1) The South Kanara district is different from other parts of the Presidency in several respects and irrigation schemes intended for this have to take particular note of the peculiar features of the district. The South Kanara district particularly is in a very inaccessible part of Presidency, ill-served by roads and intersected by a number of streams. has the largest rainfall of any district in Madras presidency not excluding Malabar. The average rainfall in the South-west monsoon, June to September about 124 inches, in the North-east monsoon from October to December 12 in the dry months January to March 4 inches, and in April to May 7.. inches. The conditions in Malabar are similar but the south-west monsoon rainfall is slighly lower being about 91 inches. The average of wet days in June August is about 25 days per month and in September about 17 days. This means that the monsoon crop from June to September or beginning of October rarely needs any water for irrigation. One crop of rice can therefore be grown without any assistance from irrigation works. The South Kanara district has not been slow to realise it and has developed irrigation of a monsoon crop of rice on a very large scale in all the valleys. Very little by way of extension of monsoon crop paddy would appear possible or necessary. Such extension may be left to the individual ryots and what the irrigation department can do is to develop a two or three crop irrigation on lands already growing (or can grow) a monsoon rice crop.

(2) Irrigation projects in Malabar and South Kanara districts have therefore to be designed to provide water to grow a second crop between October and January and a third crop from February to May. The rainfall from October to January is about 12½" and from February to May is about most of which however falls in May and at a time likely to damage the crop in ears rather than help it. The rainfall in October is about 8" and no assistance from irrigation will be needed in October. The assistance required in November with a rainfall of 3" will be slight, assistance by a high water table and plentiful spring supplies of water will be available after a heavy south-west monsoon. The assistance required in December and January in both of which months the rainfall is less than an inch is the real measure of irrigation needs. The quantities actually used may be derived from existing tanks using stored water but no information spring flows. For the third crop irrigation supplies will be required practically from February to April and also in the early part of May and the entire quantity required for irrigation will have to be found from storage or diversion works across streams. A study of minimum duty figures and depths in inches required for the entire crop in relation to existing sources for a third crop should also be made. The requirements may possibly be about 12" to 15" for second crop and 24" to 30" for a third crop and the minimum duty about 30 for channels in an efficient condition. These figures are merely suggestive and should not be accepted without verification.

(3.) Due to the extraordinarily heavy rainfall, there is a large spring flow available in most of the rivers, particularly in South Kanara district. The amount of this flow which is surplus after meeting existing irrigation requirements is to be ascertained in each case. The ryots have been in the habit of putting up earthen mud dams at a cost [illegible] running up to Rs.2,000 by bunding up the rivers to hold up water for irrigation of small areas of second and third crops. As the country is undulating, none but very small irrigation channels exist and these dams across rivers have to be put up at short intervals. They serve to store water in river courses from which water is lifted to the level of the land for irrigation by picotahs. The method is extensively practised on nearly all rivers and considerable ingenuity has been displayed in constructing these dams and using nature's resources to the best advantage. Some of the lower dams serve the dual function of holding up fresh water and excluding salt water from the sea. One of the possibilities of extending irrigation is the conversion of these mud dams into regular anicuts with supply channels on both sides to utilise the water which now flow unused into the sea. The Gurupur scheme and Shiriyar were examples of these projects. The nature of the country is however so very difficult that suitable channel alignments for large areas of irrigation cannot be secured at an economic cost from channels taking off above the dams. A number of such anicuts would be required. ~~The rivers are wide and shallow and two anicuts would be required.~~ The rivers are wide and shallow and

anicuts to be built across them except where suitable rocky [illegible] are available, must cost large sums of money. Coupled with [illegible] that the areas benefited are small and that the water is only useful for second and third crops, the schemes cannot be productive generally and must cost a considerably large sum of money relatively per acre of land irrigated than projects in flatter country. The redeeming feature however is the extremely good soil and the large value of the produce that can be grown on them. Water rates as high as Rs.10/- per acre and possibly a contribution from the ryots towards the capital cost would appear to be necessary in some cases but the whole thing has to be investigated and the economies of each scheme independently worked out. In view of the larger quantities required for a third crop, than for a second crop, the water rate for the third crop may be justifiably higher. This is a matter for the Collector to say. (It is learnt that the yield of a third crop (February to May crop) is higher than second crop (October to January).

(4) There appears to be also a possibility for developing small minor irrigation schemes. The requirements of the second and third crops should be carefully ascertained and at the head of each small catchment of possibly 50 to 100 acres, a storage tank may be built to store water from the monsoon rainfall to grow a second crop on the land lying below it; and if this tank is built so as not to submerge any cultivated land but only waste or poramboke lands at the head of the valley, no existing irrigation will be affected. Development on these lines for innumerable small tanks seems possible but it is better to proceed in small stages first by executing a few pilot schemes for tanks in areas round about Mangalore where the performance of such tanks can be watched. It would be worthwhile not to treat them entirely as remunerative schemes until their potentialities are discovered. Once the scheme is found feasible and is found popular it would be easy enough to secure the necessary support and multiply such schemes.

(5) The case of Chandramadaga tank, one of the existing tanks, is interesting. The tank has a catchment area of only .38 sq. mile or 250 acres. It has a waterspread area of 25 acres and storage capacity of 2.83 M.cft. It irrigates about 263 acres of second crop, the first crop of 623 acres being fed by rains mostly. There are said to be springs feeding tank and the second crop is reported to require water enough only for a period of 1½ months. In another case reported by the Minor Irrigation Supervisor the Hariyane tank in Kandanur village in Coonapur taluk, the waterspread area is given as 35 acres and the second crop cultivation about 150 acres but the catchment is not known. These show the wide limits of variation in the performance of existing tanks. Some attempt at checking and getting out correct figures of the actual performance of other existing tanks should be made and duty figures (a) for second crop and (b) for the third crop (if a third crop is grown under particular tanks) arrived at on which to design the pilot schemes.

(6) The next class of schemes is irrigation of lowlying lands lying below tide levels mostly of a saline character to grow a second or a third crop. No monsoon crop on this would be possible and where it is raised it is generally raised in mounds in a season different from that raised on the high lands usually in August, September and harvested in December-January. A crop coming later, from February to May is what is most valuable and prized. Earthen bunds are put in to exclude salt water and hold fresh water in the low water courses to irrigate the bunded fields from which water in the earlier stages is baled out to permit of a system of cultivation. This method of cultivation is called 'Punjakal' and is said to be followed extensively in Enamakkal lake. It consists of

1. Extension of salt water by an earth bund and a masonry or other type of weir with coffer boxes or standards to take planks which are opened out during south-west monsoon flood or alternatively breaching of the earthen bund artificially in a portion of it to pass the monsoon flood.

2. Dewatering of the lands to enable cultivation being carried out.

3. Providing fresh water storage to irrigate the land when required.

(7) All these conditions have to be satisfied for efficient functioning of the scheme which is peculiar to Malabar and South Kanara. The peculiarities of this scheme and a suitable design for works for conditions obtaining in these tracts are features which require careful study and in the initial stages there must be some failure to appreciate some factors. Where irrigation is of a normal kind the ordinary type of irrigation works would serve but where the catchments are large and the lands are under water for most of the time in the monsoon, the problem is more difficult. In all but clear cases, it is best to take over and build earthen bunds with temporary surplusses with stakes, brushwood strew and earth, for a few years till experience is gained in working them. They can be later converted for a portion of the length into masonry to regulate monsoon and low water flows. The drainage areas and the levels of lands to be irrigated vary very considerably with each place and in most cases pumps are required to dewater the lands even as a preliminary to starting cultivation. I would suggest that in the cases already under examination Government might take up the construction of the main dams and provision of pumping sets for dewatering the lands and attend to the construction and maintenance of such bunds and pumps and to dewater the areas for purposes of cultivation. A reasonable rate per acre may be collected from all lands on which a crop is grown and where pumping is involved provision may be made to collect pumping charges from the lands from which water is removed. All interior bunds and channels and storage basins should be put in by the ryots. Government should maintain an establishment for carrying out these works and pumps and engines will also have to be provided and the whole work will have to be supervised by the P.W.D. staff with the assistance of the Revenue wherever required. It is beyond the capacity of individual ryot or even of a Janmi who may happen to hold the lands as the areas involved are fairly large and there is risk involved in the ventures. So in the interests of the Grow More Food and to obtain data with a view to make these structures popular and permanent features of irrigation in this area, it is suggested that Government should incur some initial expenditure and take over and maintain a few such works in the form in which they exist at present, suitable masonry structures being provided later on ~~after~~ experience is gained with working the scheme for a year or two. In the cases where the data available is adequate to put up permanent structures and bunds this may be done as quickly as possible after the bunds are taken over. The Superintending Engineer may send up proposals on the above lines individually in consultation with the Collectors of both districts, both for construction and maintenance of temporary constructions and also for permanent constructions. In all cases the satisfactory and successful features of Enamakkal and Vyam dams may be followed closely for purposes of design.

* *

9th February 1947.

(13) Anicut across Shiriya river.--Proposals for a tank and supply channel on the left from the Shiriya river have been under consideration for a considerable time and plans and estimates for them are under preparation. The site of the anicut has been the subject of correspondence. Mr. N. Govindaraja Ayyangar suggested a change of site, but this new site is seen to result in a more costly anicut and orders have therefore been given to finalise the estimates adopting only the original site. The proposals have not been examined in detail but they appear to be generally suitable from an examination of the plans, and an inspection of the site has been at site. The scheme is a very costly one, the cost being about Rs. 1,000 per acre. This is because the anicut is a pretty costly structure and the channel which runs in extremely difficult country. The proposal includes carrying the water from the left side channel across the river by an aqueduct to the right. The desirability of converting this aqueduct into a syphon may be considered. An aqueduct may be subject to damage by floating debris over the river, whereas a pipe syphon under the bed would be free from such damage. In either case, proper foundations will be necessary. The scheme is a typically difficult one and as pointed out by Mr. N. Govindaraja Ayyangar care must be taken to provide workable data in framing an estimate.

10th February 1947.

(14) Mulki river - Mundukur and Phalimar dams. There are mud dams put up across the Mulki river to irrigate some areas of second and third crops. Phalimar is the lower dam and Mundukur the upper dam. There have been objections from the lower Phalimar dam ryots to the construction of the Mundukur dam by the upper ryots. The matter appears to have been amicably settled by the Collector of South Kanara, the arrangement being that supplies in the upper dam should be opened immediately there is any difficulty for water at the lower or Phalimar dam. The proposals are to convert these two mud dams into masonry ones. The river is about 2 feet wide at Mundukur dam which site was inspected. The Phalimar dam site was not inspected. The width of the river at the latter place is said to be about 250 feet. The catchment area of the river is said to be about 100 sq. miles. Enormous volumes of floods must be flowing down the river during the south-west monsoon season. The flood levels pointed out show a level of overflow over the marginal lands of 4 to 5 ft. The bed appears to consist mostly of sand and there will be difficulty in getting suitable foundations without costly works. The areas benefited in relation to the size of the work will be comparatively small. However, without a proper investigation of foundations in the river and arrangement of suitable design, it is difficult to say what a work suitable for the locality will cost. It will either have to be a regulator type or a low masonry dam with cast iron, cutstone or rail standards with removable planks. The height of water to be held up over the river bed being nearly 10 feet, the design will be costly. The possibility of a rough stone anicut of the Kistna and Godavari type may be considered if large quantities of stone can be had cheaply nearby. The mud dam put up by the ryots of Mundukur is an excellent piece of work, built up of hay, brushwood and earth, The bye-pass channel with a weir of brushwood is also an ingenious bit of work. The cost of the mud dam alone if paid for is said to be nearly Rs.3,000, but in practice has all been done by voluntary labour and by free gift of materials and feeding of labourers by an enthusiastic village community. The areas directly benefited are said to be about 300 acres but the indirect benefits are said to extend to a large area of garden lands due to the rise in the water table as seen in the wells. In spite of the dam 10 feet high, all the lands are only irrigated by baling with picotahs. The additional crop produced by the dam is very considerable and the dam has been considered fully worth the trouble and expense. The question of constructing a masonry anicut at this dam site should be investigated by the special staff when it is appointed.

(15) Pavanji River - Temporary dam site:-There is a mud dam across the Pavanji river to divert water for irrigation and exclude salt water. On the right there is a small laterite formation adjoining a hillock which serves as a byewash. In spite of this, the bund has breached for a short length in the middle of the river course at a point where the river bed is of laterite. The river bed on the left is ~~xxxxxx~~ all sand with possibly laterite underneath. The river is possibly about 200 to 300 feet and an anicut across this with angle iron or cutstone standards would be a costly construction. It may however be investigated.

(16) On the left side, a small Thodu comes and joins the Pavanji river. Mr. Siqueira, Official Receiver and some other people from Mangalore are interested in reclaiming the swamp area in the upper of the 'thodu' by putting a mud dam near the 13th mile of the road from Mangalore to Udipi. The bed of the thodu is not very deep. The area drained does not appear to be large. A low masonry dam with earth bunds in continuation on both sides seems feasible and one or low level vents operated by screw gearing shutters at the left may be provided to deal with the low flows. Outstone or cast iron may be provided for the low dam in which planks may be inserted to keep out the salt water from damaging the lands. These planks should be removed during the flood season. An estimate on the above line may be prepared and submitted along with the levels of the lands to be irrigated. It is presumed that no pumping will be necessary to irrigate the lands suitable for cultivation and that the ryots will make the necessary arrangements both for dewatering and also for providing such fresh water storage as may be necessary to irrigate a third crop at the end of the dry season. The question of water rate to be charged should be taken up with the Collector.

(17) Navigation canal and navigable waterways in South Kanara etc:-Inspected portions of the alignment of a proposed canal north of Gurupur river and south of Pavanji river. A high ridge has to be cut through if a line parallel to the coast line is adopted. There appears to be a saddle in the ridge through which canal with more economical cutting may be possible. Without a line of levels, it is not possible to say anything further. For the investigation of this and other schemes, the Superintending Engineer has asked for a special supervisor and staff for investigation. When this staff is sanctioned and posted, the matter may be investigated and suitable proposals made.

11th February 1947.

(18) Gurupur river scheme:-Inspected the sites of the anicut in the Gurupur river. Some investigation for right and left side channels has been done and the Superintending Engineer has just submitted an estimate for about 5 lakhs, for an anicut across the river and two channels one on either side at one of the three sites previously under consideration. From a study of the survey, the middle site appears to be the best as it would give the shortest length of anicut and there is boulder in the middle of the river dividing the stream into two halves and providing suitable approach to the two channels taking off on either side. The river drains about 222 sq. miles at the site of the anicut and the scheme can therefore successfully irrigate a large area of second crop and a comparatively small area of third crop.

...

/ True copy /

P.W.D.

Memo. No.2454 N/46-5 dated 29/4/47.

Sub:- Irrigation - South Kanara Dt. - Inspection of certain schemes by H.P.(P.W.)

Ref:- From the C.E.(I) No.2882/46-B-7 dated 27-2-47.

The C.E. (I) is informed that the Govt. approve of the general line of action proposed by him in paras 7 & 10 of his notes of inspection (sent with this No. quoted above) both in regard to the S.Kanara and Malabar Districts. But no commitment should be made or expenditure incurred on that account without obtaining the prior sanction of the Govt.

2. The C.E.(I) is requested to report specifically about the dam lower down the Shiriyar river referred to by H.M. (P.W.) in his notes of inspection communicated with Memo. No.2454 N/46-2, d/ 27-11-1946. He is also requested to report the action taken by him in regard to the following schemes:-

1) Reclamation of the Swamp in Chaliyar river and

2) Diverting the water of a drainage course in Udayamhole village.

To

The C.E.(I).

From Sri
A.R. Venkatachari B.E., M.I.E., (Ind.,)
M.Am.Soc.C.E., I.S.E.,
Chief Engineer for Irrigation
Chepauk, Madras.

To
The Secretary to Government,
Public Works Department.

-v-v-v

Enc:- Copy of D.O. reply to the Board No. 125/.77-
dated -.-.43.

PWD (J)

To As

Reg Memo No 206 PWD 20-6-47 requested for this file is put up as a file sent to Rev dept with their dept U.O No. 3581/J1+8-2 of 17-9-48. Rev dept may be requested to return the file to this dept. ~~Final dept~~ may also be requested to ~~state~~ the stage of their file (Ref No 3996/H/47) ~~finalising the final dept~~ on the subject indicated at 'A' overleaf.

A/

B/

PM 21/4/49

21/3/49

PW-J no 2451/46 dt 5/3/49

Copy of C.E.I's U.O. Reply No. 5325/47 B-3 dated 9-6-48.

My remarks on the points raised by the Board are noted below:-

(1) Feasibility of the scheme for formation of a mud dam:-

The construction of a dam at site 'A' is feasible and will cost about ₹.4,000/- A mud dam may therefore be constructed as an experiment and its results watched so that we may have an idea of extension of I. and III crops by baling from the river. I agree with the Collector's suggestion that permission may be granted for the construction of the dam through the joint efforts of all the parties concerned.

(2) Relaxing conditions (2) and (3) mentioned in the petitioner's letter dated 14th November 1946:

In view of the Collector's report that there are no Government lands down the river and if the dam is constructed jointly by all the ryots there will be no room or any claim for compensation from third party, the two conditions are unnecessary in the present case and may therefore be relaxed.

(3) Grant of Subsidy: If the dam is decided to be constructed by the ryots, a subsidy of 50% of the cost or a maximum of ₹.2000/- may be granted on condition that atleast 20 acres are brought under II and III crop cultivation after obtaining necessary [illegible] taking from the ryots. But it may be noted that the dam being mud and of temporary nature will have to be renewed every year.

(4) Construction of dam by Government after obtaining part contribution from ryots:-

This is only an alternative suggestion to grant of subsidy. Granting a subsidy of 50% of the cost and leaving the construction to ryots and construction of the dam by Government as a part of irrigation work with 50% contribution does not differ so far as expenditure to Government is concerned. But in view of the probability of claims for damages by third party, it is desirable to leave the construction to the ryots themselves by paying some subsidy if the Board [illegible].

5) Construction of permanent dam:-

This may be considered after the results of the mud dam are watched for 2 or 3 years.

/ True Copy/

V. Venkatachalam 17/2

MANAGER.

trm: 14-2-

Lne 14/2.

TOAS

Please see the PWD note on ℘ 28 ante

1 See 'A' in PWD note on ℘ 28 ante:- The file is limited. (It may be sent to PWD along with this file

L.F.I. This file was received linked with L.F.II from P.W.D.

'B' in PWD note on ℘ 28 ante:- The Bd which was reminded, reported that it was awaiting ~~Govt's reply and the~~ the reports from the C E and the Supdg Surveyor and that it would submit the same soon after the reports were received. (It was reminded again on last on 13.2.49 and will be reminded again on 13.3.49.)

The Bd's final report in this matter has not yet been received

2 The file may be returned to PWD along with L.F.I.

7.3.49

10/3/49

PWD

ASSISTANT SECRETARY PUBLIC WORKS DEPARTMENT 11 MAR 1949

Revd 0 13832 4

11.3.49

(with L.F. PWD No 3581 J/48)

3½ P.W.D(I)

Memo No 2454/I/46-1Pd 24-3-49.

Sub: Irrigation - S. Kanara Dt. - Inspection of certain schemes by HM(PW)

Ref: From the CE(I) No. 6121/46-B-10 dt 14-2-1949

The CE(I) is requested to state whether the Shiriyar anicut scheme sanctioned in G.O Ms No 4 To PW dt 7-2-48 will cover also the dams within the limits of the Bambrana village referred to by the HM(PW) in his notes of inspection communicated with Memo No. 2454 N/46-2 dt 27-11-46 and if not, he is requested to report specifically on the suggestion to replace the temporary dam by permanent structures

To
The CE(I)

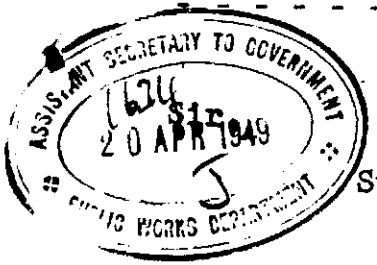
PM 23/3/49 24/3/49

22.3.49

From Sri
A.R.Venkatachari,B.E.,M.I.E.(Ind),
M.Am.Soc.C.E., I.S.E.,
Chief Engineer for Irrigation,
Chepauk, M a d r a s.

To

The Secretary to Government,
Public Works Department.



No. 6121/46 B-11 dated 14th April 1949.

Sub:- Irrigation - South Kanara District - Inspection of certain schemes by Honourable Minister, Public Works.

Ref:- Govt.Memo No.2454 J/46-10 dated 24-3-49.

The construction of an anicut across the Shiriya river in Bombrana Village is not covered by the sanction in G.O.Ms. No.410 P.W. dated 7-2-48. Proposals for the above scheme are now under examination with Superintending Engineer, Coimbatore,

for Chief Engineer for Irrigation

trm:16-4-

P.W.D.

Sub Irrigation - South Kanara Dt.
Inspection of certain Schemes by H.M.(P.W)

A.S.

Please see the inspection notes of H.M.(P.W.) during the recent visit to South Kanara. These notes covers six irrigation Schemes in South Kanara Dt. in three main taluks viz. Kasargod, Mangalore and Udupi taluks

Shiriya Scheme

2. In para 1. of his note, H.M.(P.W) has ordered that the plans and estimates prepared for the Shiriya River Scheme may be set up. In connection with a L.A. Qn. the CE (I) has recently reported that the plans and estimates for the Shiriya river Scheme have been prepared and that the cost of the Scheme as now estimated was very high, being Rs. 7,06,000/- for irrigating an area of 354 acres most of which was already raising one crop. He further added that the possibility of reducing the cost was being examined by him and another question of objection from the lower down rights was under correspondence with the Bd. of Rev. ~~(He also stated that Rao Bahadur Chandrasekhara Aithal was not in favour of the Scheme)~~

~~3. This deptt has got no information regarding other Schemes mentioned in his notes, except the last one viz)~~

Chantar Kadaya. In this case also H.M.(P.W.) has ordered that the plans and estimates already prepared may be

Submitted for sanction. The CE (I) have [illegible] reported that this scheme would be very costly and involved acquisition of valuable wet lands. The question of ryots' payment of betterment water rate was [illegible] and as they have now offered to pay, the scheme may be re-examined.

4 The CE (I) may be asked to submit a detailed report on all the schemes contained in the note. Draft submitted

PSR 25.11.48

25.11.48

X

25/11/48

[illegible] 27-11-48).

From the S.E.(I) No.[illegible], [illegible] 1948.

This notes on pp.1-2 above and the [illegible] on pp. [illegible] may be perused. The S.E.(I) was asked to submit a detailed report on the various irrigation schemes proposed by the [illegible] (P.W.D.) after his tour in South Kanara Dt. in November, 1948. The S.E's. report is at p.13 c.f.

The S.E. reports that he has inspected most of the schemes in person by [illegible] (P.W.D.) and has issued the necessary instructions to the local officers in the matter. An extract from the notes

2. Attention is invited to the general notes of inspection at pp.18-19 c.f. (they relate to both S.Kanara and Malabar. Malabar has been dealt with in particular in Rei C.F.) The S.E. states that the monsoon crop in Malabar and S.Kanara can be grown without any assistance from Irrigation works and that irrigation projects in these districts have to be designed to provide water for a second crop between October and January and a third crop from February to May. [illegible]

The J.E. has also pointed out that due to extra [illegible] rainfall there is a large spring flow available in the rivers particularly in S. Kanara District. The ryots have been in the habit of putting up earthen mud dams by building up the rivers to hold up waters for irrigation of small areas of second and third crops at a cost running upto Rs.2,000/- in some cases. Some of the lower dams serve the dual function of holding up irrigation water and excluding salt water from the sea. The J.E. suggests that one of the possibilities of extending irrigation is the conversion of these mud dams into regular anicuts to utilize the water which now flow unused into the sea. As this the area benefitted would be small and the water should be only useful for the second and third crops, it is reported that the schemes cannot be productive generally.

3. The J.E. is also for developing small minor irrigation schemes. He suggests a few pilot schemes for Minor irrigation tanks in areas round about Mangalore where the performance of such tanks can be watched. He adds that it would be worthwhile not to treat the Minor Irrigation works entirely as remunerative until their potentialities are discovered.

4. The C.E. says that another class of schemes is irrigation of low level lands lying below the tide level, mostly of a saline character, to grow a second or a third crop. The ryots have put up earthern bunds to exclude water and hold fresh water. This method of cultivation is called 'Punjakal' consisting of the following three processes:-

1) Exclusion of salt water by an earth bund.
2) Providing fresh water storage to irrigate the land when required, and
3) Dewatering of lands;

5. The C.E. states that in all but clear cases, it is to take over and build earthern bunds with temporary surplusses with stakes, brushwood straw and earth for a few years till experience is gained in working them. A portion of the length can later on be taken up for conversion into masonry construction to regulate monsoon and low water

two mud dams across the Mulki river. Mundukur ... and Phalimar is the lower dam. H.M.(P.W.) ... to the objection raised by the ryots of the lower ... construction of the upper dam. He directed the ryots to ... approach the Collector ... having the matter ... The C.E. now states that the matter appears to have been ... and that it is proposed to construct both the dams in ... work. The S.E. did not inspect the Phalimar dam. ... he has inspected the Mundukur dam and has issued ... instructions for investigation by the special staff ... it is appointed.

(4) Chantarmadaga Scheme:-Attention is invited ... of the notes at pp.1-2 ante. It is reported by the S.E. that the Chantarmadaga tank which has a catchment of ... 650 acres irrigates about 263 acres of second crop, ... crop of 653 acres being fed by rains mostly. The ... actual performance of the tanks in the district show a great variation, ... C.E. states that attempt should be made at checking ... getting out correct figures of actual performance and ... figures for the second and third crops on which to ... pilot schemes.

7. In addition to the above, the C.E.(I) has ... the following two schemes which were not inspected by H.M.(P.W.):-

Navigation canal and navigable waterways in S. ... District:-The C.E. has asked the S.E. to apply for staff for investigating the schemes.

Gurupur river scheme:-The S.E. has submitted to the C.E. an estimate for the construction of an anicut across the Gurupur river scheme at a cost of about 5 lakhs. C.E. is considering the proposals and states that it can successfully irrigate a large area of second crop ... comparatively small area of third crop.

8. The following schemes which were inspected by H.M.(P.W.) are not covered by the S.E's. notes of ...

1) Reclamation of the swamp in Chaliyar river;

Para 5 on pp 3-4 ante The general line of action proposed by the C.E. in this para may be approved, but he may be asked to obtain the orders of Govt before taking over each of the existing dams for action on the lines proposed Rev. & Fin. may be for remarks on the point

I agree 31/3

Para 6 on pp 4-5 ante The C.E may be asked to report specifically on the lower dam referred to at portion marked 'A' in the para

Para 8 on pp 5-6 above The C.E may be asked what action has been taken with regard to the two schemes referred to in the para

30.3.47 S 31/3

P.W.D no no. 2654 N/46-4 31/3/47 with c.f no 3036 N 46-3 31.3.47

Rev/Fin.

Rev. Deptt.

S 31/3/47

TO U.S

Please see the notes of P.W.D on pp 2-6 above This department may agree with the view of P.W.D at A above

2. The file may be passed on to Fin

EC

2.4.47

2.4.47

3.4.47

Fin

2124 H/47-1 3.4.47 with c.f. no 233 F 47

CM 2455 N/46.

Finance (Exp

The note of the P.W.D. on pages 2-6 above may be perused

Finance also may agree to the course of action suggested at A on p. 6 above

CR 11.4.47

~~Fin. Sec. (S)~~

(At A CR 11.4.47 10464) The C.E. may be specifically informed that no commitment should be made or expenditure incurred without obtaining the prior sanction of the Govt

CR 11.4.47 TOW

Fin. No 21311 EC-1 11-4-47 423

P.W.D.

Kindly see notes from X at p2 ante.

Please see the Rev. and Fin. Depttts. ~~above Note~~ agree to the suggestion at 'A' on p.6 ante but Fin Suggest that ~~the CE(S)~~ no expenditure should be incurred or commitment made by the CE(S) without prior sanction of the Govt. The CE(S) may be informed accordingly. A draft Memo to the CE(S) covering also the points at 'B' on p.6 ante is subd. below for approval

For orders as to circulation.

RSR 22/4/47

KL 24/4/47

KL 25.4.47

S Meenakshisundaram 28/4.

4.47 (P.W)

Fin. B 29/4

Issue KL 29.4.47

SECRETARY TO GOVT. 29 APR 1947 PUBLIC WORKS DEPT.

Cir 29.4.47. R 29.4.47.

p 25 (Issued as Memo. No. 2454 N/46-5, dt/ 29.4.47)

pp 1-4 From the C E (I) no 6121/4613-10 dt 14-2-49
To AS

In November 1946 the C E (I) was asked to submit a detailed report on the various irrigation schemes proposed by the H M (P W) after his tour of inspection in S. Kanara Dt. The C E (I) submitted in July 1947 a report on the subject. In this report, he dealt with in detail the general line of action he proposed to pursue in respect of various works in S. Kanara and Malabar Dt. He also reported specifically on four out of the six irrigation schemes mentioned in the H M's inspection note. In Memo no 2454 N/46-5 dt 29-4-47 the Govt approved the general line of action proposed by C E (I) both in regard to S. Kanara and Malabar Dists. It was, however, ordered that no commitment should be made or expenditure incurred without obtaining the prior sanction of the Govt. The C E (I) was also requested to report specifically about the dam lower down the Shiriyar river mentioned at A in the H M's note on p 5 c/i and also about two other schemes mentioned in H M's Inspection note and not taken up in the C E's Viz Reclamation of swamp in Chaliyar river and Diverting the water of a drainage course in [illegible] de

2. The C E (I)'s report on the three schemes are at pp 27-29 c/f. The Shiriyar scheme has been sanctioned by the Govt in G.O Ms No. 410 Pw dt 7-2-48 and it is reported to be under execution. The C E (I) has stated that the scheme for the reclamation of swamp in Chaliyar river is now under investigation by the E. E. S. Kanara Dn. As regards the third scheme Viz Diverting the water of a drainage course in Udayavhole village, t

It is stated that in April 1946 Dr N Sesha Rao suggested the provision of certain irrigation facilities in Udayar kole village in Udipi taluk. In the meanwhile the grant in the Rev dept sanctioned as an experimental measure the proposal of Sri. M.S Adhikari of Kalkala to construct a temporary dam across the Udayar river in the limits of Matta village to prevent the entering of salt water and provide adequate water for II & III crops. The Bd was requested to report in due course how far the Scheme was successful. In view of Dr. Adhikari's proposal, it was decided that Dr. Sesha Rao's suggestions might be held over till the results of Sri Adhikari's proposals were watched. Rev dept have noted that Sri Adhikari's proposal is still under consideration and that the Board's report is awaited.

3 In view of the fact that necessary action is being taken on all the schemes, ~~this file may be now be closed~~. Where papers may be recorded in a G.O.

18/3/49

26/3/49. In Ltr No. 410 RW 1/49.2.48 even also the dam within the limits of Bambrana village referred to at 'A' on page 7.

pp 67-68 ante 7(S)

21-3-49

To AS submitted. There is no information here. The A draft memo is submitted. ~~The information is not available~~

23/3/49.

24/3/49

(Issued as Memo No. 2454J/46-10 d 24-3-1949.
(From the C.E.(I) No. 6121/46-B-11 dated 14-4-49)

To

A.S.

Please see the C.E.(I)'s letter at p 33 cf.

In November 1946 the C.E.(I) was asked to submit a detailed report on the various irrigation schemes proposed by the H.M(P.W) after his tour of inspection in S.Kanara Dt. In his report submitted in Feb 1947 the C.E.(I) dealt with in detail the general line of action he proposed to pursue in respect of irrigation works in S.Kanara and Malabar. He also reported specifically on four out of the six schemes mentioned in H.M's inspection notes. In Memo No 2454N/46-5 d 29-4-47 the Govt approved the general line of action proposed by the C.E.(I) ~~But it~~ was, however, ordered that no commitment should be made or expre. incurred without obtaining the prior sanction of the Govt. He was also asked to report specifically about the dam lower down the Shiriyar river mentioned at 'A' in H.M's minute on p 5 cf and also about two schemes mentioned in H.M's inspection note and left out in the C.E.'s report Viz. Reclamation of swamp in Chaliyar river and Diverting the water of a drainage course in Udayarhole.

3. The C.E.(I)'s reports at pp 27-29 cf and p 33 cf indicate the present stage of the schemes. The shiriyar scheme has been sanctioned by the Govt in G.O.Ms No 410 P.W dated 7-2-48 and it is now under execution. The C.E.(I) has stated in his latest letter that the scheme already sanctioned does not cover the dam within the limits of the Bambrana village referred to by the H.M in his notes of inspection . He has also stated that proposals for the above scheme are now under examination with the S.E. Coimbatore circle.

4. It is reported that the scheme for the reclamation of swamp in Chaliyar river is now under investigation by the E-E. S,Kanara Bn. As regards the third scheme, Viz Diverting the water of a drainage course in Udayarhole village, it is submitted that in April 1946 Dr U.Sesha Rao suggested the provision of certain irrigation facilities in the village.

Meanwhile the Govt in the Rev deptt sanctioned as an experimental measure the proposal of Sri M.S.Adhikari of karakala to construct a temporary dam across the Indrayani in the vicinity of Moka village. The Board was requested to report in due course how far the scheme was successful. In view of Sri Adhikari's proposal, it was decided that Dr SeshaRao's proposal might be held over till the results of Sri Adhikari's proposals were watched. Rev deptt have noted that Sri Adhikari's proposal is still under consideration and that the Board's report is awaited.

In view of the fact that necessary action is being taken on all the three schemes, these papers may now be recorded in a G.O.

PKM 25/4/49 25/4/49 27.4.49

G.O Ms.No 1515 dt 28.4.49

Irrigation - S. Kanara Dt

H M's Inspection notes -

Papers recorded.

PKM 28/4/49.